

Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



	Site Details	Box 1			
SI	te No. C633068				
Si	te Name Former Tri-State Industrial Laundries Site		,		
Ci	te Address: 1634 Lincoln Avenue Zip Code: 13502 ty/Town: Utica bunty: Oneida te Acreage: 1.7				
Re	porting Period: October 28, 2017 to October 28, 2018				
		YES	NO		
1.	Is the information above correct?				
	If NO, include handwritten above or on a separate sheet.				
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	•			
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		•		
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	•			
	If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.				
5.	Is the site currently undergoing development?		•		
		Box 2			
		YES	NO		
6.	Is the current site use consistent with the use(s) listed below? Industrial				
7.	Are all ICs/ECs in place and functioning as designed?				
	IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.				
A	Corrective Measures Work Plan must be submitted along with this form to address t	hese iss	ues.		
•					
Si	gnature of Owner, Remedial Party or Designated Representative Date				

		Box 2	A .
		YES	NO
8	Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?		
	If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.		
9.	Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)		Ω.
	If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.		
SIT	E NO. C633068	Box	3
	Description of Institutional Controls		

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Paraol	Ourser	Institutional Caster-I
Parcel 318.62-2-10.1	<u>Owner</u> BRE Lincoln Avenue, LLC	Institutional Control
	The Lincoln Avenue, LEG	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan
318.62-2-11.1	BRE Lincoln Avenue, LLC	O&M Plan
	``	Ground Water Use Restriction Landuse Restriction Site Management Plan
	,	Soil Management Plan Monitoring Plan O&M Plan IC/EC Plan
318.62-2-12.1	BRE Lincoln Avenue, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan
318.62-2-12.2	BRE Lincoln Avenue LLC	O&M Plan Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan
318.62-2-14	BRE Lincoln Avenue, LLC	Ground Water Use Restriction Landuse Restriction Site Management Plan Soil Management Plan

	O&M Plan Monitoring P	an
	IC/EC Plan	
1927 - Harris II. (1997) - Harris Martin (1997) - Harris II. (1997) - Harri II. (1997) - Harris II. (1997) - Harri II. (1997)	a ny managamétan na panéna kanan akan kakan na kanan kana	Box 4
Description of Engine	eering Controls	
Parcel 318.62-2-10.1	Engineering Control Groundwater Treatment System	
	Vapor Mitigation Cover System Groundwater Containment Air Sparging/Soil Vapor Extraction	
318.62-2-11.1	Air Sparging/Soil Vapor Extraction Groundwater Treatment System Vapor Mitigation Cover System Groundwater Containment	
318.62-2-12.1		
	Groundwater Treatment System Vapor Mitigation Cover System Groundwater Containment Air Sparging/Soil Vapor Extraction	Ŋ
318.62-2-12.2	Groundwater Treatment System Vapor Mitigation Cover System Groundwater Containment Air Sparging/Soil Vapor Extraction	
318.62-2-14	Groundwater Treatment System Cover System Groundwater Containment Air Sparging/Soil Vapor Extraction Vapor Mitigation	

			Box 5
	Periodic Review Report (PRR) Certification Statements		
1.	I certify by checking "YES" below that:		
	<ul> <li>a) the Periodic Review report and all attachments were prepared under the direc reviewed by, the party making the certification;</li> </ul>	tion of,	and
	<ul> <li>b) to the best of my knowledge and belief, the work and conclusions described in are in accordance with the requirements of the site remedial program, and general antipageing practices; and the information procented in accurate and compate</li> </ul>		
	engineering practices; and the information presented is accurate and compete.	YES	NO
	,	•	
2.	If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that following statements are true:	each In all of th	stitutional në
	(a) the Institutional Control and/or Engineering Control(s) employed at this site is since the date that the Control was put in-place, or was last approved by the Dep	unchai artmen	nged t;
	(b) nothing has occurred that would impair the ability of such Control, to protect p the environment;	bublic h	ealth and
	(c) access to the site will continue to be provided to the Department, to evaluate remedy, including access to evaluate the continued maintenance of this Control;	the	
	(d) nothing has occurred that would constitute a violation or failure to comply with Site Management Plan for this Control; and	n the	
	(e) if a financial assurance mechanism is required by the oversight document for mechanism remains valid and sufficient for its intended purpose established in th		
		YES	NO
	•	•	
	IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.		
	A Corrective Measures Work Plan must be submitted along with this form to address th	iese iss	iues.
	Signature of Owner, Remedial Party or Designated Representative Date		

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IC CERTIFICATIONS SITE NO. C633068	
Box (	6
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE	
I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false	
statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of	the
PenalLaw. BRE Lincoln Avenue, LLC	
c/o Fitzgerald, Depietro and Wojnas	
Stephen Bussey, 291 Genesee Street	
Authorized Representative at Utica, New York 13501	
print name print business address	
Designated Representative for Remedial Party	Dented
am certifying as(Owner or Remedial	Party)
for the Site named in the Site Details Section of this form.	
S.H.Bussey 11/27/18	
Signature of Owner, Remedial Party, or Designated Representative Date	
Bendering Certification	

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	C/EC CERTIFICATIONS			
Pro	Box 7 Dfessional Engineer Signature			
I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. Barton & Loguidice, Inc. 443 Electronics Parkway				
print name	atitatitat,			
am certifying as a Professional Engine	er for the Remedial Party			

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## **2018 Periodic Review Report**

NYSDEC Site Number: C633068

Prepared for: BRE Lincoln Avenue, LLC c/o Fitzgerald, Depietro and Wojnas 291 Genesee Street Utica, New York 13501

> **Prepared by:** Barton & Loguidice, Inc. 443Electronics Parkway Liverpool, New York 13088

## **Table of Contents**

<u>Sectic</u>	<u>on</u>	Page
1.0	Executi	ive Summary1
2.0	Site Ov	verview2
3.0	Remed	y Performance, Effectiveness, and Protectiveness3
4.0	IC/EC	Plan Compliance Report4
5.0	Monito	ring Plan Compliance Report6
6.0	6.1 6.2	ion & Maintenance
7.0	Conclu	sions8
Table	<u>s</u>	
Table 1 Table 2		IC/EC Descriptions
<u>Figure</u>	<u>es</u>	
Figure Figure		Site Location Map Site Plan

## **1.0 Executive Summary**

The site is the former location of Tri-State Industrial Laundries located at 1634 Lincoln Avenue in the City of Utica (refer to Figure 1). The site is currently owned by BRE Lincoln Avenue, LLC (BRE). An investigation of subsurface contamination was conducted in accordance with the Brownfield Cleanup Project (BCP) that identified tetrachloroethylene (Perc), trichloroethene (TCE), Benzene, Xylene (mixed), ethylbenzene, and vinyl chloride as the contaminants of concern. The Remedial Investigation identified three (3) areas of concern (AOC) including (refer to Figure 2):

- 1. B-8 area located in vicinity of the former assembly room (AOC 1);
- 2. Area located in vicinity of the former exterior wastewater discharge pit, including accumulated water within the pit (AOC 2); and
- 3. Area of non-chlorinated petroleum impacts adjacent to the truck loading area along Lincoln Avenue (AOC 3).

The site was remediated in accordance with the NYSDEC's February 2013 Decision Document, including:

- 1. Installation of a dual phase soil vapor and groundwater extraction (DPE) system;
- 2. Cleaning the former waste water exterior pit (AOC 2);
- 3. Installation of sub-slab depressurization systems (SSDS) beneath the site structure;
- 4. Maintenance of site cover to allow for industrial use of the site;
- 5. Execution and recording of an Environmental Easement;
- 6. Development and implementation of a Site Management Plan; and
- 7. Periodic certification of the institutional controls listed above.

The remedies were installed in accordance with the August 2013 Final Engineering Report and have been operated continuously in accordance with the June 2013 Site Management Plan. The SSDS system in the basement and DPE wells 1, 2, 3 and 4 have been shut down in association with ongoing remedial excavation.

The site is currently undergoing source removal of impacted soils within the garage and basement as outlined in the September 18, 2017 Pilot Test Work Plan and July 18, 2018 Remedial Excavation Work Plan. The full scale Remedial Excavation Work Plan was approved by the Department in correspondence dated August 1, 2018. Full scale remedial excavation activities commenced in August 2018 with substantial completion expected by the end of 2018. Perimeter groundwater monitoring has temporarily ceased in 2018 during remedial activities. Perimeter groundwater monitoring will resume in 2019 following completion of the remedial excavation activities. Details of the remedial construction will be compiled in a Final Engineering/Construction Completion Report and updated Site Management Plan in 2019.

## 2.0 Site Overview

The Site is located in the City of Utica, County of Oneida, New York and is identified as Block 318 and Lots 62-2-10.1 + 10.2, 62-2-11.1 + 11.2, 62-2-12.1, 62-2-12.2, 62-2-13, 62-2-14 on the City of Utica Tax Map. The Site is an approximately 1.66 acre area bounded by New York State Routes 5, 8 and 12 (Arterial) to the north, Lincoln Avenue and residential neighborhoods to the south, commercial facilities to the east, and mixed residential and commercial properties to the west (see Figure 1).

The BCP investigation identified the contaminants of concern for the site as tetrachloroethylene (Perc), trichloroethene (TCE), Benzene, Xylene (mixed), ethylbenzene, and vinyl chloride. The Remedial Investigation identified three (3) areas of concern (AOC) including:

- 1. B-8 area of chlorinated compounds located in vicinity of the former assemble room (AOC 1);
- 2. Chlorinated compounds in the former exterior wastewater discharge pit, including accumulated water within the pit (AOC 2); and
- 3. Area of non-chlorinated petroleum impacts adjacent to the truck loading area along Lincoln Avenue (AOC 3).

The selected remedy is a Track 4: Restricted use with site-specific soil cleanup objectives. The specific components of the selected remedy included:

- Installation of a dual phase soil vapor and groundwater extraction system.
- Cleaning the former waste water exterior pit (AOC 2) of all water, debris and sediments and proper disposal of removed materials.
- Installation of sub-slab depressurization systems beneath all on-site structures.
- Maintenance of site cover to allow for industrial use of the site.
- Execution and recording of an Environmental Easement.
- Development and implementation of a Site Management Plan.
- Periodic certification of the institutional controls.

The Remedial Action Work Plan was approved in February 2013 with remedial construction completed in April 2013. The remedial systems have operated continuously since installation with exception of NYSDEC approved temporary shutdowns of the DPE system to monitor for asymptotic conditions. The DPE system and basement SSDS have also been decommissioned in association with the current active source removal remedial excavation.

## 3.0 Remedy Performance, Effectiveness, and Protectiveness

AOC-2 has been eliminated by cleaning and closure of the exterior pit. AOC-1 and 3 have had substantial source reductions through operation of the dual phase extraction system. AOC-1 and 3 are being further remediated in 2018 as part of a source removal remedial excavation in the garage and basement area as outlined in the approved July 18, 2018 Remedial Excavation Work Plan.

## 4.0 IC/EC Plan Compliance

Table 3 summarizes each Institutional and Engineering Control. No corrective measures are required.

Table 1. IC/EC Descriptions			
Engineering Control	Description	Objective	Status
Maintenance of Cover System	Comprised of asphalt pavement, concrete building slabs or a minimum of 12 inches of clean soil.	<ul> <li>Eliminate human direct contact with soils containing VOCs.</li> <li>Limit infiltration of water.</li> </ul>	Operational with no changes.
Operation of the Existing Groundwater Extraction System	<ul> <li>In operation since 1991</li> <li>Consists of eighteen (18) groundwater extraction points</li> </ul>	Provide hydraulic control	Shut down per NYSDEC approval.
Sub-Slab Depressurization System	<ul> <li>Designed in accordance with EPA's Radon Prevention in the Design and Construction of Schools and Other Large Buildings (June 1994).</li> <li>Comprised of a well point installed in a suction pit to create negative pressure beneath the slab.</li> <li>Separate SSDS extraction installed based on building layout.</li> </ul>	Prevent soil vapors (volatile organic compounds) from entering occupied space within the site structure.	Operational with exception of shutdown of the basement extraction point associated with the active remedial excavation.
Dual-Phase Extraction System	<ul> <li>Includes eight (8) extraction points manifolded to a rotary claw vacuum pump located within a treatment structure on the exterior north side of the building.</li> <li>Treatment is provided through three (3) 55-gallon capacity granular activated carbon (GAC) containers operated in series. Treated groundwater is discharged to the Oneida County sanitary sewer in accordance with the Site's sewer use discharge permit.</li> <li>Vapors are exhausted on-site; air sampling was conducted downwind of the exhaust point to verify that vapor treatment is not required.</li> </ul>	Provide mass contaminant source reduction	Decommissioned in association with the active remedial excavation.
Exterior Pit Closure	<ul> <li>The exterior pit located in AOC 2 was cleaned, capped and closed in place.</li> <li>Excess fluids were removed, the pit interior cleaned, existing pipes were capped and grouted, and the pit was filled to capacity with gravel then the area was topsoiled and seeded.</li> </ul>	Provide mass contaminant source reduction	Closed – no further action required.

Table 1. IC/EC Descriptions				
Engineering Control	Description	Objective	Status	
Institutional Controls	Compliance with the Environmental Easement and the Site Management Plan (SMP) by the Grantor and the Grantor's successors and assigns	<ul> <li>prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and,</li> <li>limit the use and development of the Site to industrial uses only</li> </ul>	No Changes.	

## **5.0 Monitoring Plan Compliance Report**

Monitoring of the performance of the remedy has been conducted in accordance with the Site Management Plan and the following Table 4 with exceptions as noted below.

Table 2. Monitoring/Inspections Schedule				
Program	Frequency	Matrix	Analysis	
Groundwater Monitoring Wells MW-1s, MW-2s, MW-2D, MW-3S, MW-5D, MW-6D, B-6, MW-7S, B-8, MW-8s, MW-8D, MW-9S, MW-9D	Historically conducted on a Semi-Annual basis. Temporarily ceased in association with the active source removal remedial excavation.	Groundwater	VOCs	
Groundwater Level Monitoring All available site groundwater wells.	Historically conducted on a Quarterly basis. Temporarily ceased in association with the active source removal remedial excavation.	Groundwater	Static Water Levels	
SSDS	Annual	Sub-Slab Vapors	Pressure Field, Visual and Operational Inspection	
Cover System Inspections	Annual		Visual Inspection	
Periodic Review Report	Annual			
Inspection Certifications	Annual			

Historic groundwater monitoring results are available in the 2017 Periodic Review Report.

## 6.0 Operation & Maintenance

#### 6.1 Sub-Slab Depressurization System Routine Operation Procedures

The SSDS is designed to run continuously. The warning devices are inspected monthly to ensure that the system was operational. The basement extraction point has been decommissioned in association with the ongoing source removal remedial excavation.

#### 6.2 **Dual-Phase Extraction (DPE) System Routine Operation Procedures**

The following procedures were performed during routine operation of the DPE system:

- Visual inspection of the system including extraction points, control equipment, pumping equipment, treatment equipment, gauges, piping and labeling;
- Routine low/pressure measurements and corresponding system balancing;
- Routine vapor concentration readings;
- Checks of pressure gauges;
- Checks on GAC vapor and groundwater media to evaluate the need for carbon changeout; and
- Water discharge sampling for Oneida County Sewer District Discharge Permit.

Routine maintenance included change out of the GAC drums and bag filters, along with other internal components to the remedial trailer. The DPE System was shut down in 2018 in association with the ongoing source removal remedial excavation.

#### 6.3 Groundwater Extraction System Routine Operation Procedures

The groundwater extraction system has been shut down per Department approval.

## 7.0 Conclusions

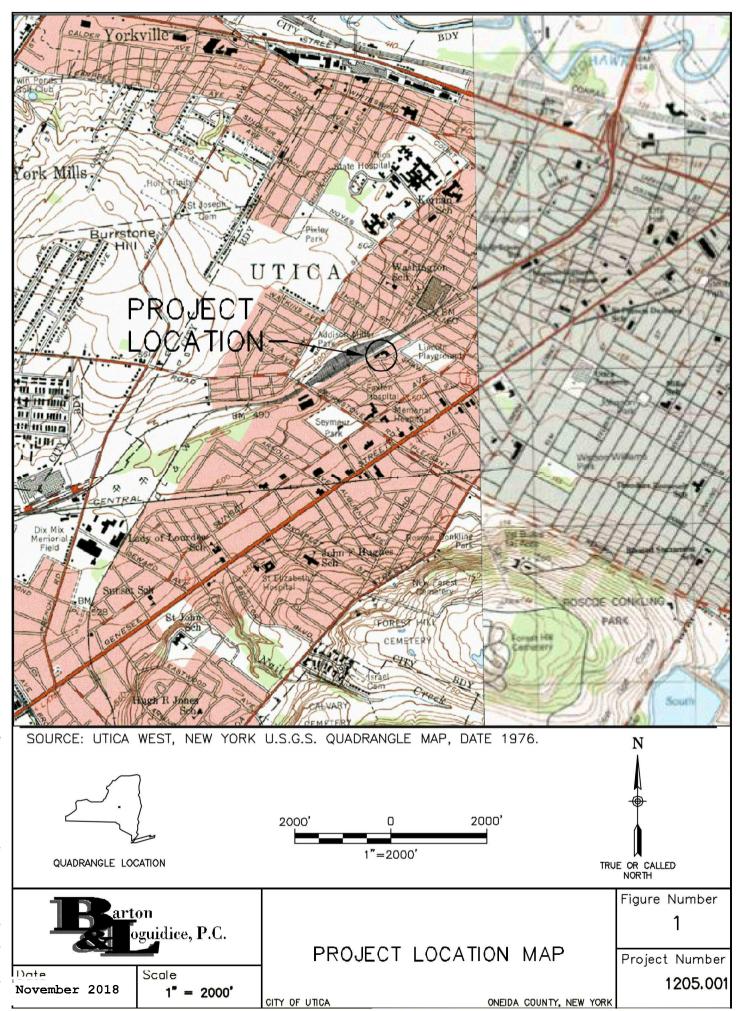
BRE Lincoln Avenue, LLC has been operating the remedial systems at the Lincoln Avenue facility since May 1, 2013 in accordance with the approved Site Management Plan. The following main site activities have occurred since approval of the November 2012 Remedial Action Work Plan.

- Installation of the DPE and sub-slab depressurization system (SSDS) remedial systems, and remedial excavation and closure of the exterior pit: March and April, 2013;
- Background groundwater sampling of the DPE extraction wells (prior to DPE system start-up): May 1, 2013;
- Start-up of the DPE and SSDS system: May 9, 2013;
- The DPE system has treated over 475,000 gallons of water since system start-up;
- Sampling of the DPE influent, effluent and extraction wells;
- Sampling of the perimeter groundwater monitoring well network;
- Sampling of the historic groundwater extraction system;
- Routine maintenance and operation of the DPE and groundwater extraction system
- Pulsing and monitoring the DPE system for asymptotic conditions; and
- "No Further Remedial Action with Maintenance of Cap, Operation of SSDS and Institutional Controls" alternative was concluded in the September 2015 Supplemental Remedial Alternatives Report analysis once the DPE system reaches asymptotic conditions.
- Supplemental subsurface site investigation: July 2017
- Excavation Pilot Test Work Plan: September 2017
- Implementation of Excavation Pilot Test: April 2018
- Implementation of Full-Scale Remedial Excavation: August 2018 to Current. Substantial completion expected by the end of 2018.

Significant capital expenditures have been spent in 2018 in association with the removal of source soils in the garage and basement. Substantial completion of the full-scale remedial excavation is expected to be complete by the end of 2018. Two rounds of post-construction perimeter groundwater monitoring will be conducted in 2019 to document the effectiveness of the remedial excavation. All data will be provided in the Final Engineering/Construction Completion Report. It is expected that the Site Management Plan will be updated in 2019 to remove all active remedial systems with exception of the SSDS, along with termination of the groundwater monitoring program.

# Figure 1

## **Site Location Map**



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# Figure 2

## Site Plan

